

REMARKS

This Amendment responds to the Office Action dated June 17, 2003 in which the Examiner objected to the disclosure, rejected claims 1 and 2 under 35 U.S.C. §102(b) and rejected claims 15-17 under 35 U.S.C. §103.

As indicated above, minor informalities in the specification have been corrected. Applicants note that Figure 8B is explicitly described on page 16 lines 12-16. It is respectfully submitted that the objection to the disclosure no longer applies. Therefore, it is respectfully requested that the Examiner withdraws the objection.

Claim 1 claims a waveguide coupler for connecting between rectangular waveguide terminals formed in two dielectric substrates arranged opposite to each other. Each of the dielectric substrates includes a contact region which conducts electricity to a grounded conductor of the waveguide terminal. One contact region is arranged to surround the waveguide terminal at a position opposite to the other contact region when both the waveguide terminals are connected together. An electrically conductive joint member is disposed between the opposing contact regions to join together the contact regions.

Through the structure of the claimed invention having an electrically conductive joint member disposed between opposing contact regions to join together the contact regions as claimed in claim 1, the claimed invention provides a waveguide coupler with a simplified connection which reduces the cost thereof. The prior art does not show, teach or suggest the invention as claimed in claim 1.

As indicated above, claims 1, 6 and 7 have been amended for stylistic reasons. It is respectfully submitted that the amendment to claims 1, 6 and 7 are unrelated to a statutory requirement for patentability and do not narrow the literal scope of the claims.

Claims 1 and 2 were rejected under 35 U.S.C. §102(b) as being anticipated by *Park* (U.S. Patent No. 5,471,181). In addition, claims 15-17 were rejected under 35 U.S.C. §103 as being unpatentable over *Park*.

Applicant respectfully traverses the Examiner's rejection of the claims under 35 U.S.C. §102(b) and under 35 U.S.C. §103. The claims have been reviewed in light of the Office Action, and for reasons which will be set forth below, it is respectfully requested that the Examiner withdraws the rejection to the claims and allows the claims to issue.

Park appears to disclose interconnection of two stripline or microstrip transmission lines between two different layers of a multilayer microwave integrated circuit. (col. 1, lines 7-9) Fig. 8 illustrates one technique for fabricating the cavity conductive walls in an interconnection for interconnecting adjacent microstriplines. Here, interconnection 180 includes the center ground plane 182 in which is formed the coupling slot, sandwiched by dielectric substrates 184, 186 which carry the microstrip conductors 188, 190. Plated through holes 192 are used to channelize around the microstriplines and the boundaries of the cavities. Cutouts are formed in top and bottom substrates 194 and 196 to define top and bottom air gaps. The resulting interior walls of the substrates 194 and 196 are plated, and the various layers bonded together. Top and bottom conductive covers (not shown) are then added to complete the conductive cavities. (col. 4, lines 40-52)

Thus, *Park et al.* merely discloses plating interior walls of substrates 194 and 196 and then bonding together the substrates 194, 184, 186 and 196. Thus nothing in *Park* shows, teaches or suggests an electrically conductive joint member disposed between opposing contact regions and joining together the contact regions as claimed in claim 1. Rather, *Park* merely discloses bonding together substrate 194 to substrate 184 and bonding substrate 186 to substrate 196 (i.e. the plated portions of substrates 194 and 196 are not joined together).

Additionally, *Park et al.* merely discloses that substrates 194 and 196 each contain slots corresponding to the microstrip conductors 188, 190. Therefore, even assuming arguendo that the plates on substrates 194 and 196 represent contact regions, these regions do not surround a waveguide terminal (due to the slots formed in the substrates). Thus, nothing in *Park et al.* shows, teaches or suggests one contact region being arranged to surround the waveguide terminal as claimed in claim 1. Rather, *Park et al.* clearly teaches away from the claimed invention since the slots formed in substrates 194, 196 are provided in the substrates.

Additionally, *Park* merely discloses plated through holes 192 used to channelize around microstrip lines and the boundaries of the cavities. Nothing in *Park* shows, teaches or suggests a plurality of electrically conductive joint members which a) surround the guide terminals as claimed in claim 2 and b) join together the contact regions as claimed in claim 1. Rather, the plated through holes 192 of *Park* are used to channelize around the microstrip lines and the boundaries of the cavities.

Finally, *Park* merely discloses bonding together the substrates 194, 184, 186 and 197. Nothing in *Park* shows, teaches or suggests using solder as claimed in claim 15, an electrically conductive adhesive as claimed in claim 16 or thermocompression bonding using metal or material containing metal as claimed in claim 17. Rather, *Park* only discloses bonding substrates together but does not show, teach or suggest what type of bonding.

Since nothing in *Park* shows, teaches or suggests an electrically conductive joint member disposed between opposing contact regions to join together the contact regions or the other features as discussed above, it is respectfully requested that the Examiner withdraws the rejection to claim 1 under 35 U.S.C. §102(b).

Claims 2 and 15-17 depend from claim 1 and recite additional features. It is respectfully submitted that claim 2 would not have been anticipated by *Park* within the meaning of 35 U.S.C. §102(b) at least for the reasons as set forth above and that claims 15-17 would not have been obvious over *Park* within the meaning of 35 U.S.C. §103 at least for the reasons as set forth above. Therefore, it is respectfully requested that the Examiner withdraws the rejection to claim 2 under 35 U.S.C. §102(b) and withdraws the rejection to claims 15-17 under 35 U.S.C. §103.

Since withdrawn claims 3-14 depend from an allowable claim, it is respectfully requested that these claims be allowed.

The prior art of record, which is not relied upon, is acknowledged. The references taken singularly or in combination do not anticipate or make obvious the claimed invention.

Thus it now appears that the application is in condition for reconsideration and allowance. Reconsideration and allowance at an early date are respectfully requested.

If for any reason Examiner feels that the application is not now in condition for allowance, it is respectfully requested that the Examiner contact, by telephone, the applicant's undersigned attorney at the indicated telephone number to arrange for an interview to expedite the disposition of this case.

In the event that this paper is not timely filed within the currently set shortened statutory period, applicant respectfully petitions for an appropriate extension of time. The fees for such extension of time may be charged to our Deposit Account No. 02-4800.

In the event that any additional fees are due with this paper, please charge our Deposit Account No. 02-4800.

Respectfully submitted,

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